

1. Few chemicals used - destroy or irritate surrounding tissue - not heal. Radium - burns outer skin of Dr. hands
care in administration as harm patient harmfully.

2. Disease organisms used weakened or killed before injected in body.

In typhoid - amt of killed bacteria injected. Absorbed by blood & stimulate formation of similar antibodies as if typhoid entered.
Usually 3 injections. Live organisms not used as persist in intestine & makes carrier of people.

3. Smallpox - inoculating discharge from eruption of mild case.

Vaccines - grown in labs. Bacteria used taken from diseased tissues & kept alive.

Antitoxins - neutralize poisons which bacteria make. Children given enough toxin to produce supp. antitoxin again.

Poison produced by bacilli - toxin. Animals blood neutralizes effects of toxin & called antitoxin. Animal bled 10 gts. Blood stands in sterile vessel until it coagulates & a clear yellow liquid separates. Is blood serum & constitutes diph. antitoxin serum used in treatment of disease. By hypodermic needle - in severe & late cases into veins.

Report V

Food Control.

Functions of Food - 3.

1. Provides energy. Depends on indiv. chem of body.
2. Supplies material for metabolism.
3. Regulates body processes. - iron for hemoglobin synthesis.

How 4. satisfied

1. Fats
2. Carbohydrates
3. Proteins
4. Mineral
5. Vitamins

Results of Deficiency

Protein - Lack of energy & body heat. ^{Structure}

Carb & Fats -

Mineral - Calcium & phosphorus - malform of bones - rickets - decayed teeth. Large during pregnancy. Iron & copper def. result in anemia.

Vitamins - ²⁴A - cold & upper respiratory infections. B - nervous & heart disease. C - scurvy & gum inflammation. D - rickets for dental devel. & decay. E - phylagea - sore mouth & tongue. Digestive disturb. diarrhea - redness of skin, exposed areas - loss of epidermis on skin.

Results of Excess

Indiv. differ. Ltd. use of fat

Fat - large amounts - nausea (maybe stored)

Carbohydrate - 2 high & 2 of sugar injurious
2 metabolic methods. Dull eating 20'

of sweets dulls appet. - nausea.

Fast fruit open sweet

Protein - Not easily Coed & by body. 2 much work of digest. Train on excretory organs.

Mineral - Potassium causes salt craving 2 little salt cause disinclination for food as pot.

2 much - interferes with digestion.

Evidences of Poor Nutrition

1. Slow growth
2. Under weight
3. Poor teeth
4. " Post.
5. Dull eyes
6. Rough Dry Skin
7. Sleep. & Disease.
8. Mental

Malnut Caused by

1. Lack of knowledge re food values
2. Poor eating habits.
3. Intense like & dislikes.
4. People starving themselves to achieve.
5. Poor income.

7 Adulteration

^{poisons}
Treatment of food often making it ^{poisonous} to health.
Pure Food & Drugs Act. Food act. is:-

1. Material mixed with foreign substances to reduce or lower its quality or effect. water mixed with milk
2. One sub. subst. for another - wholly or part.
Cotton seed oil instead of Olive oil
3. May value const. either wholly or part.
Skimming cream of milk.
4. Food stuff treatment &

adding sulphite to Old meat to give bright red color.

5. Poisons injurious to health added - chemical preservatives as borax.

6. Food stuffs wholly or part decomposed sold or contained ^{animals} sold.

Terra alba.

alk

very yellow.

Mineral Substances

Poisonous color or flavor

spiritus liquor

marco

Sausages not contain

Chemical & color

Veal or tuna fish used as sub for chick - indigestible

Misbranded -

2^d food imitation or sold under same name

wt measure or amt not on pack.

Any misleading statement of product.

Maple Syrup. often glucose added.

Color to butter.

Saffron to gum drops.

Loose butter extracted from cheese.

Hard added to cheese.

Milk & leaves sold as T.

Condensed milk

Meat - salt

Drugs -
alch. for cold sores.

Preservation.

involving Act. of micro-organisms causing food to decompose.

- Ways - 1. free food from infect. organism
2. to consume food avoid spoilage

By - cooking
refrigeration - cold storage, freezing.
drying - Salting - Smoking - Canning
Preserving in strong sugar Sol. or sirup or syrup
Pickling

Chief Ways of Pres. meat

1. Method of long time but sent to places. Must be fresh Temp to kill bact 5°C to 15°C . Too low takes away flavor. Beef tape warm not survive after 25 days. Pork - - killed only at low temp

Drying - Fruits preserved by drying - Ordinary Temp sometimes higher. 30% water left in. Veg & milk also by drying method. Bact doesn't grow in dry food. Meat dried a bit & storing.

Salting - Pickling

Veg. salted. Vegg. & preserve - acid salt sauce changes flavor.

204 Canning - safest way. Every kind of food. Sugar increases power of keeping food. France, 1810
Tin or glass if air tight.

Restaurants -

Cleanliness

Type & no. of vermin.

Unnecessary handling.

Of equal if not greater imp. of retailed store. Carriers & in early stages of disease i. e. clerks, dish washers, etc.

Utensils might be thoroughly cleaned in this case infective agents survive.

Higher rate of infection among staff ^{than} in ~~the~~ stores.

Ordinary use of dish washing no good to destroy disease.

Use of boiling water most effective. Soapy water on wire tray. No wiping necessary.

Diseases (by contact) away from rest. til

everything over.

Hotels in P.M.S.

Well - lighted & ventilated, free from flies, & vermin. Windows doors inaccessible free by screens. All linen clean & sanitary. All food properly cleaned & served. ^{Rest.} Rooms for food - clean, & in good order.

Swimming Pools -

Case & Sanitation.

2 types - 1. fill & draw - water drawn off & replaced at frequent intervals.

2. Recirculating type - pipes, - inlets, outlets, - hair catcher, pumps, mechanisms for coagulation & alkaline treatment, filters, disinfecting apparatus, water heater, suction cleaner.

Construction - Efficient drainage & cleaning
Sewer gullies for sludge & scum
Vacuum cleaner apparatus for removal of sediment from bottom of pool.

Disinfection

Continuous. Chlorinator of approved type

for application of chorline to water. Tests
1 or 2 times per day.

Types 1. Use of chorline compounds - calcium
liquid chorline hypo - chlorite

2. Ultra - violet lamps. Purified
only when in contact with lights. - not
very satisfactory.

3. Recirculating - Water pipes into
sand filters receives dose of liquid
chlorine - Coagulated ^{alum} added to water. ^{at intake}
Makes water sticky film prevents bacteria
of bacteria. 4 sufficient action water
must be alkaline - soda ash or
ammonia added.

4. Bacterial Test - 1. 4 bact. content
& presence of organisms of colon group.

2. 2 samples taken per wk.

3. Algi develop - destroyed
by copper sulphate.

Bathing hood -

12 - 20 person & every 1,000 gal. of water

Lockers, toilets & showers frequently
scrubbed. Ample floor drains. No connections
below.

Athletic Ft. Infection.

Fungus hard to kill.

200 Controlling or preventing.

1. Recog cases of infection & preparing & treating.

2. Compelling wearing of shoes - no contact w/ floor.

3. use of antiseptics ft. bath

sodium hypo. chlorite used. .05% - 1% strength

Standards

1. Well lighted for safety.
2. Perfectly smooth surface - no cracks, etc.
3. Run away drainage from pool.
4. Pool & runway free from obstruction.
5. Clear, pure, colorless water by inflowing stream, filtration alone insufficient.
6. Disinfection necessary by chlorine of lime, chlorine gas, ultra-violet rays or ozone.
6. Strict supervision of bathers
 - a. Med. Exam.
 - b. Inspection at entry.
 - c. Pre-cleansing bath w. soap.
7. Attendance sufficient in swim. & L. Saving always on duty.
8. Pool locked when not in use.

Boarding Houses -

1. M. O. H. can enter into B. H. or tenements.
2. If on such exam. more person than healthful - not more than 600 c. of air space - unclean, etc. - to endanger public health - allowed to remove anything obstructing.
3. Placards - Habitations unwholesome or dangerous health of public closed by M. O. H.
4. Owners of B. H. compelled to have fire escapes if more than 2 floors high.
5. 1934 British Housing Bill

- 1 room - 2 people.
- 2 " 5 - 3 "
- 3 " - 5 "
- 4 " - $7\frac{1}{2}$ " ($\frac{1}{2}$ child under 10)
- 5 " - 10 .

Milk

Report 8

- Protected Protective Food.

Milk - valuable, protected - also butter, cheese, meat, fruit, veg. etc. whole grain cereals.

- convenient source of calcium - $\frac{3}{4}$ of c. from diet by milk. not expensive. Also proteins, salts, vitamins, sugar, some fat. Phy. state makes it digestible.

Protein not nutritive.

Casein provides amino acids.

Milk also supplies fat & carbonyl.

Fat melt at lower temp than other fats. easily digested. Vit A., & Riboflavin (B₂ vit⁺) are present. These essential for growth.

Vit A. forms part of visual purple. helps prevent night blindness. Other & normal metabolism.

Thiamin - (B₁, V) Beriberi.

Not perfect food as doesn't contain all constituents - not much iron but what it has is utilized well.

From Pasteurization

Nutrient value of milk protein not harmed.

Sugar & fats not altered.

Calcium & phosphate content not diminished.

Doesn't lessen Vit. A. content.

Total Nutrient value not altered.

Increase consumption of milk in Can. would improve level of Public Health.